



National Aeronautics and Space Administration
Goddard Space Flight Center

Wallops Flight Facility, Wallops Island, Virginia

Inside Wallops

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Space Day Activities

Educational flight opportunities were the focus of two Space Day activities presented by Wallops personnel last week. Space Experiment Module (SEM) - 05 principal investigators from Chincoteague Elementary were visited May 20 by Dave Wilcox, Arturo Vigil, Barbara Justis and Keith Koehler (photos right and below). The group discussed the students' experiment on the next Space Shuttle mission and life in space. Meanwhile, Wallops' Chuck Brodell joined members of the Greenbelt Shuttle Small Payloads Projects Office on May 21 at the "The Mall" in Washington, DC. The group displayed hardware and presented information to Space Day participants on the Get Away Special, SEM, and the Suborbital Student Experiment Module.



Digital photos by Rick Huey.



Test Pilots To Testbeds — NASA Cushions Liftoff And Eases Bedsores

A foam material developed by NASA researchers to cushion pilots against the rigors of test flight, and currently in use aboard the Space Shuttles, is now being successfully sold in pillows and mattresses by a Lexington, KY, company to treat disorders ranging from sleeplessness to the more severe illness of pressure ulcers, commonly known as bedsores.

Tempur-Pedic's products have been cited by the U.S. Department of Veterans Affairs as "very effective for the treatment and prevention" of bedsores and "very comfortable" to patients.

The Veterans Affairs Department and the National Institutes of Health have purchased hundreds of Tempur-Pedic products for use in their pain management and ulcer treatment programs. Bedsores, which can be fatal if left untreated, cost the Medicare and Medicaid programs almost \$2 billion annually for treatment of wheelchair-bound, nursing home and hospital patients.

NASA Administrator Daniel S. Goldin said, "This NASA technology designed to protect astronauts and pilots is now being used to help the elderly, the disabled and hospital patients. NASA is deeply committed to transferring our unique knowledge to improve the quality of life for all Americans." Tempur-Pedic's CEO, Robert Trussell added, "We have taken NASA's space-age material and developed it into 'body-friendly' bedding, which distributes pressure more evenly throughout the spine, joints and other parts of the body."

Tempur-Pedic's pillows, mattresses and other products made from Temper Foam have billions of self-ventilating memory molecules that slowly react to body heat and weight. It was first developed by NASA's Ames Research Center for use in aircraft test-pilot seats and to protect airline passengers in crashes.

Temper Foam was recently inducted into the United States Space Foundation's Space Technology Hall of Fame, Colorado Springs, CO.

Wallops Shorts.....

Balloon Launches

A 39.57 million cubic foot NASA scientific balloon carrying a cosmic and heliospheric physics experiment to measure antiproton and positron spectra was launched May 16 from Ft. Sumner, NM. The balloon was prematurely terminated for operational reasons. The principal investigator was Steven J. Stochaj, New Mexico State University.

On May 18, a 4 million cubic foot NASA scientific balloon was successfully launched from Fort Sumner, NM. The upper atmosphere research experiment was to obtain vertical profiles from 32,810 to 98,430 feet of gases that trace the motion of the atmosphere on different time scales. The principal investigator was William Brune, Pennsylvania State University.

A "Weather Channel" In Every Cockpit?

Airlines and smaller airplanes are one step closer to having up-to-the-minute, graphical weather displays in their cockpits, thanks in part to a new NASA aviation safety initiative.

NASA has selected research proposals from eight industry teams to develop Aviation Weather Information (AWIN) systems for commercial airliners and general aviation aircraft.

"Pilots tell us their number one priority is graphical weather information. We want to make it as easy to get a weather channel in the cockpit as it is in your living room. Technologies already exist that could help make that happen," said Michael Lewis, Director, NASA Aviation Safety Program (AvSP), based at the Langley Research Center in Hampton, VA.

NASA has set aside more than \$8 million that will be matched by industry to fund AWIN projects over the next 18 months.

For the first phase of the program, teams led by Honeywell and Boeing/McDonnell Douglas Corp. will receive up to \$2.4 million apiece to develop a national and worldwide AWIN solution. Over the same 18-month period, the NavRadio group will be awarded up to \$1.2 million and the ARNAV team, up to \$400,000, for a general aviation weather information system. Other teams led by Rockwell International, Honeywell and NavRadio will split \$1.6 million to develop specific components for AWIN.

NASA Visitor Center
June Special Events



June 6 and 20 — A model rocket launch will be held at 1 p.m. Models of various rockets will be launched. Model rocketeers are invited to bring their own rockets and launch them. The launch will be canceled if it is raining or winds exceed 18 mph.

Saturdays and Sundays — “Puppets in Space,” a 10-minute puppet show will be presented at 11 a.m. Puppet astronauts and Sam the monkey will explore space flight, including the space suit. An eight-minute version of the film “Astrosmites” follows the puppet show.

Sundays — “Humans in Space” is the subject of a 1 p.m. program for children of all ages. The 30-minute program looks at living and working in space, including a review of the astronauts’ culinary delights and their wardrobe. The program is followed by a hands-on children’s activity. Children will be given the opportunity to create their own “space helmet”.

Every day at the Visitor Center, children 5-10 years of age can earn a “Space Ace” certificate and a lithograph by completing an activity sheet during their visit to the Visitor Center.

The Visitor Center is open Thursday through Monday from 10 a.m. to 4 p.m. The complex is closed on Tuesday and Wednesday.

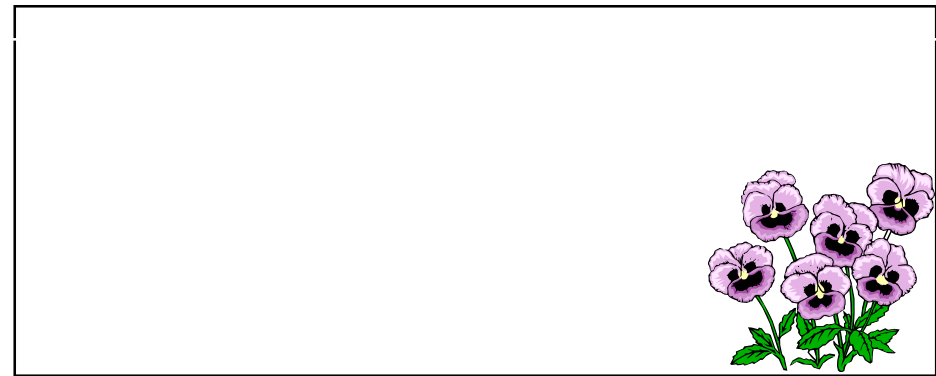
ISO 9000 System Documentation
(16 hours - Two 8-hour sessions)

When: July 8-9
8 a.m. to 4:30 p.m.
Where: Building E-2

In this comprehensive course, participants learn how to develop and document a quality system, meeting the requirement for compliance with ISO 9000. The quality manual, procedures, and instructions are discussed. Guidelines are given for preparing process flow charts necessary to design the system. Participants become fully familiar with quality system documentation and its ability to improve Wallops’ overall processes.

Contractor employees may register by sending a memo to Sherry Kleckner, Building F-6. This memo must be on company letterhead and state that the employee is interested in taking the training course. The employee’s immediate supervisor and contract monitor (either ATR or COTR) must sign the memo. This course will be offered to contractors at no cost on a “space available” basis.

Training requests should be routed through Sherry Kleckner.



Jeff Lee Named Computer Sciences Corporation Employee of the Year

Computer Sciences Corporation (CSC) recently named Jeffery E. Lee as the 1997 Employee of the Year at NASA’s Wallops Flight Facility. Lee, employed by CSC since December 1987, received the award for work in computer systems administration, software development and for his innovative work in computer network security.



Left to right, CSC Department Manager, Ron Brooks, Jeff Lee, and CSC Program Manager, Bob Hickman.

“Lee was presented the award for outstanding performance, technical excellence and professionalism; the finest qualities of achievement through dedication,” said Bob Hickman, CSC Program Manager. Hickman added, “Lee’s selection for the honor was due to his sustained level of performance and professionalism. He is a valuable Computer Sciences Corporation team member.”

Lee supports NASA’s Observational Science Branch (OSB) with the primary responsibility for developing and using software to assess the performance integrity of the on-orbit TOPEX Radar Altimeter. He also is the systems administrator for the OSB Research Computing Center and supports network activities and provides computer user support to scientists, engineers and technical and administrative staff.

Upcoming Course.....
Space Systems I: An In-Depth Multi-Disciplinary Review:
(36 hours — Four 8-hour sessions and One 4-hour session)

This multi-disciplinary course provides a complete summary of the technologies needed to understand and develop spacecraft systems and instrumentation. The course presents a systems engineering approach for developing and understanding the design and testing of spacecraft systems. The emphasis will be on how today’s technology is incorporated into the planning, designing, fabrication, integration and testing of modern space systems. Space Systems I is recommended for engineers, scientists or managers who wish to broaden their perspectives and capabilities.

When: June 15-18 (8 a.m. to 4 p.m.)
June 19 (8 a.m. to Noon)
Where: Building E2
Fund Source: Directorate
Submission Deadline: June 1, 1998

Training requests from Code 800 should be routed through Sherry Kleckner. All training requests must reach Code 114 (Greenbelt) no later than June 1. For further information, call Kimela Ouakil, x66-5087 or Tracey Roberts, 66-5378.

Center Director’s Colloquia Series

Life is More Than Your To-Do List
Expanding Your Choices in Times of Change and Challenge

Speaker: Maggie Bedrosian
When: Wednesday, June 3
10 to 11:30 a.m.
Where: Wallops, NASA TV Channel 6

Description: Does your VISA card get more charging than your personal batteries? Do you wonder what other people do to stay fresh, focused and functional in today’s blur-paced environment?

Author Maggie Bedrosian will help us summarize current challenges and define the results we seek in our work and lives. She will also share insights into blending purpose, passion and play. Join us for success stories and specific strategies to inspire you to greater vitality and vigor.

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